

Technology Deployment Initiatives and Partnership Program

Request for Funding

FY 2001

FHWA Strategic Goal Area: Safety

Project Title: Showcase Durable Pavement Markings

Problem Statement:

Pavement markings are important appurtenances especially in recreation areas and at high volume visitor sites. Current requirements mandate alternatives to high VOC paints. New pavements have typically not been able to sustain first applications of pavement markings, probably due to the curing and initial latent debonding pavement markings. Many States are evaluating and adopting durable pavement markings as a feature on new pavement surfaces and on roads in good or better condition. These durable markings have superior bonding, last longer in a visible and retroreflective condition, and are sustainable during adverse climate and traffic conditions. Some durable marking manufacturers offer warranties of up to four years.

Proposal:

This proposal is to demonstrate to our customers the benefits of initial application of durable markings as part of a new roadway surface. It is proposed to provide durable pavement markings, preferably methylmethacrylate, on a single project having a new pavement surface. The length would be limited to new surface, but all standard markings would be provided, edge line, center line, and legends as necessary. The retroreflectance would be measured at regular intervals using the mobile retroreflectometer assigned to WFLHD. The evaluation would cover about five years.

Benefits:

Verify the applicability of durable markings to our type of projects, establish an expected life cycle, and determine cost factors. To the customer the benefits include a longer lasting marking, with higher levels of retroreflectance, and increased durability in the typical traffic and climatic conditions.

Resources/Cost:

Contract for durable pavement marking materials in place - \$200,000.

Evaluation measurements of the retroreflectivity for 5 years \$50,000. To be funded in subsequent years individually.

Duration: 5 Years

Organization/Method:

Include in a construction contract an item for durable pavement markings for a significant portion of the lane miles to be evaluated against typical pavement markings as a control section.

Collect retroreflectivity measurements for 5 years and report findings.

Submitter:

Agency/Division: Western Federal Lands Division
Name: Cal Frobeg
Phone: 360-696-7648
Date: 15 May 2000

Champion:

Name: Rich Barrows/Bruce Wasill
Phone: 360-696-7704/360-696-7703

**DEPARTMENT OF TRANSPORTATION
FEDERAL HIGHWAY ADMINISTRATION
WESTERN FEDERAL LANDS HIGHWAY DIVISION - VANCOUVER, WA**

DETERMINATION AND FINDINGS

Findings

The proposed Interagency, Reimbursable Agreement with the Oregon Department of Transportation, is to provide durable pavement markings for the Cascade Lakes Highway reconstruction project.. The standard Oregon design for Methyl Methacrylate, having two types of beads, will be used for the yellow and white pavement markings as laid out by the Deschutes County in cooperation with the WFLHD project manager Scott Blower.

1. Reimbursable Agreement Number
2. It is ☐ more economical ☒ more convenient to obtain the required supplies or services through the proposed Interagency Reimbursable Agreement, rather than by direct contract with a commercial concern because: ☒ The Agency has demonstrated that has greater knowledge with respect to the subject work: ☒ The Agency has indicated that it has resources available to begin this work in a timely manner: ☒ The Agency personnel performing the work are locally located resulting in much reduced travel and subsistence costs, and therefore, total costs are expected to be less than if performed by outside firms.
3. ☐ Other: _____
4. Legal authority for the acquisition otherwise exists.
5. The action does not conflict with any other agency's authority or responsibility.

Note: [If the servicing agency must do a contract action, see FAR 17.503(b) for required statement]

Note: [If the servicing agency operates a commercial or industrial activity using Govt. personnel, see TAM 1217.503(c) and Appendix A for required statement]

Prepared by:

Date:

Program & Coordination Engineer

Determination

Based upon these findings, I hereby determine that it is in the Government's interest to obtain the required supplies/services as authorized by the Economy Act (31 U.S.C. 1535) if from another Federal agency, or as authorized by Title 23 U.S.C. if by a State or local agency.

Date

Contracting Officer

Cascade Lakes Highway

Durable Pavement Marking Showcase

It is proposed to provide durable pavement marking using Methyl Methacrylate, on approximately one half of the 31 mile FLH project paving Cascade Lakes Highway. To avoid conflict with potential endangered species, the MMA is proposed for installation from the project beginning to about mile post 14. Termini should be related to physical features for future identification when measuring retroreflectivity.

Currently the Deschutes County has a reimbursable agreement to install water borne paint for the entire project. To showcase the durable markings and evaluate the benefits and costs, it is proposed to modify this original agreement to use water borne paint for only about one half of the project. An additional reimbursable agreement is needed with ODOT to install MMA using the State's Stripping Crew. Scheduling is critical to coordinate with both the paving and the endangered species.

Contacts:

FHWA Design Engineer – John Capri 360-696-7685

Deschutes County – George Kolb

ODOT Maintenance – Joel Fry 509-986-4485

ODOT Stripping Crew Leader - Leonard Braden 541-957-3676

FHWA Technology Deployment Engineer – 360-696-7648



U.S. Department
of Transportation

Federal Highway
Administration

WESTERN FEDERAL LANDS HIGHWAY DIVISION
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(360) 696-7700 FAX: (360) 696-7846

May 22, 2005

Refer to: HTS-17.1
File: 741 & 713#1
#

Mr. Joel D. Fry
Field Operations Specialist
Office of Maintenance
Oregon Department of Transportation
800 Airport Road SE
Salem, OR 97301-4798

Reimbursable Agreement # 01-A-17-0064
Cascade Lakes Highway OR PFH 46-1(5)

Dear Mr. Fry:

Enclosed are two signed originals of Reimbursable Agreement No. 01-A-17-0064, for installation of Methyl Methacrylate pavement markings on the Cascade Lakes Highway project PFH 46-1(5) in Deschutes and Klamath Counties.

If you concur with the terms and conditions of the agreement, please have it signed, and return one original to our office to the attention of Kathy McCormmach. The other original is for your records.

The enactment of the Debt Collection Improvement Act of 1996 requires all federal payments to be made electronically. Payments will be made via direct deposit by electronic funds transfer for this agreement and all subsequent agreements. Please complete the enclosed "Payment Information Form" and return to Federal Highway Administration, Western Federal Lands Highway Division, (WFLHD) so payment can be processed accordingly. If you have any questions regarding billing information, please call Anne Henderson at (360) 696-7757.

If you have any other questions regarding this agreement please call Cal Frobig, at (360) 696-7648.
Sincerely yours,

Robert B. Lale III
Program Coordination Engineer

Enclosures:
Reimbursable Agreement No. 01-A-17-0064 (2 originals)
Payment Information Form
cc: Kathy McCormmach, Program Coordination, WFLHD
Anne Henderson, Finance, WFLHD
John Snyder, COE, WFLHD
Scott Blower, Project Manager, WFLHD